ABSTRACT

Liquid water soluble polymer suspensions in non-aqueous solvents are extremely stable over long periods of time with minimum separation of the solvent and no hard packing of the dispersed water soluble polymer. The suspensions enable a user to rapidly add the suspension to water, being mixed at low speeds, without the formation of lumps or fisheyes and without generating fugitive dust in the process. The suspensions are environmentally safe and biodegradable. Unlike many other liquid polymer suspensions, the suspensions exhibit minimal oil or grease upon dilution. They contain no surfactants that can add to the oil and grease determination. The suspensions and the fluids produced by diluting the fluids to a working concentration of the water soluble polymer exhibit low toxicity to marine organisms and to humans. The suspensions can be manufactured from ingredients suitable for use in personal care applications such as cosmetics, shampoos and the like. The suspensions can be manufactured using ingredients suitable for use in indirect contact with food. The suspensions are also pourable at low temperatures. The suspensions are also suitable for use in the formulation of fluids suitable for use in hydraulic fracturing and other well applications.